

ENVIRONMENTAL INDICATOR (EI) RCRIS CODE (CA725)

Current Human Exposures Under Control

Facility Name: **BARON BLAKESLEE**
Facility Address: **5920 NE. 87th Portland, OR 97220**
Facility EPA ID #: **ORD 061483384**

1. Has **all** available relevant/significant information on known and reasonably suspected releases to soil, groundwater, surface water/sediments, and air, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been **considered** in this EI determination?

- ☒ **If yes** - check here and continue with #2 below.
- ☐ **If no** - re-evaluate existing data, or
- ☐ **If data not available** skip to #6 and enter "IN" (more information needed) status code.

BACKGROUND

Definition of Environmental Indicators (for the RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EI developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

Definition of "Current Human Exposures Under Control" EI

A positive "Current Human Exposures Under Control" EI determination ("YE" status code) indicates that there are no "unacceptable" human exposures to "contamination" (i.e., contaminants in concentrations in excess of appropriate risk-based levels) that can be reasonably expected under current land- and groundwater-use conditions (for all "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

Relationship of EI to Final Remedies

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The "Current Human Exposures Under Control" EI are for reasonably expected human exposures under current land- and groundwater-use conditions ONLY, and do not consider potential future land- or groundwater-use conditions or ecological receptors. The RCRA Corrective Action program's overall mission to protect human health and the environment requires that Final remedies address these issues (i.e., potential future human exposure scenarios, future land and groundwater uses, and ecological receptors).

Duration / Applicability of EI Determinations

EI Determinations status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

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2. Are groundwater, soil, surface water, sediments, or air **media** known or reasonably suspected to be **“contaminated”**¹ above appropriately protective risk-based “levels” (applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action (from SWMUs, RUs or AOCs)?

“Contaminated” Media	Yes	No	?	Rationale / Key Contaminants
Groundwater	✓			1,1,1 TCA,TCE,PCE,Methylene chloride, CIS 1,2-dichloroethane
Air (indoors)			✓	Data not yet collected.
Soil (surface, e.g., <2 ft)	✓			PCE and TCE
Surface Water			✓	Data currently being collected.
Sediment			✓	Data not yet collected.
Soil (subsurface e.g., >2 ft)	✓			TCE, PCE, 1,1,1 TCA
Air (outdoors)			✓	Data not yet collected.

- ☐ **If no** (for all media) - skip to #6, and enter “YE,” status code after providing or citing appropriate “levels,” and referencing sufficient supporting documentation demonstrating that these “levels” are not exceeded.
- ☒ **If yes** (for any media) - continue after identifying key contaminants in each “contaminated” medium, citing appropriate “levels” (or provide an explanation for the determination that the medium could pose an unacceptable risk), and referencing supporting documentation.
- ☐ **If unknown** (for any media) - skip to #6 and enter “IN” status code.

Rationale and Reference(s):

From 1972 to 1993, Baron Blakeslee operated a permitted storage and solvent recovery business. The facility ceased all operations at the site in 1992. The company then implemented an approved Closure Plan, removing all waste and decontaminating all areas used for management of hazardous waste. Results of soil and groundwater sampling conducted at the site under corrective action requirements of the facility’s Permit identified volatile and semi-volatile organic compounds. The primary constituents detected at the site include perchlorethylene (PCE), trichlorethene (TCE), 1,1,1-trichloroethane (TCS), and cis-1,2-dichloroethene.

Maximum levels of contaminants in groundwater are TCA 10 mg/L; and methylene chloride at 2 mg/L. For soil, maximum contaminants levels are PCE at 510 mg/L, and TCE 63 mg/L. Groundwater is the primary pathway of concern at this site, which is located near the western edge of the City of Portland’s Columbia South Shore Wellfield.

On-site groundwater contamination is likely to extend off-site, and could threatened the western end of the City of Portland’s Columbia South Shore Wellfield. This wellfield contains backup drinking water wells that are intended to supplement Bull Run surface water supplies. Groundwater from the site could also migrate towards the Columbia Slough and contaminate surface water within the slough.

A Consent Order dated May 8, 2000, imposes an RI/FS to investigate all media and the extent of contamination. (See Phase 2 RFI Data Report 3, dated June 30, 1999, and May 8, 2000, Order on Consent).

Footnotes:

¹. *“Contamination” and “contaminated” describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriately protective risk-based “levels” (for the media, that identify risks within the acceptable risk range).*

². *Recent evidence (from the Colorado Dept. of Public Health and Environment, and others) suggest that unacceptable indoor air concentrations are more common in structures above groundwater with volatile contaminants than previously believed. This is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration necessary to be reasonably certain that indoor air (in structures located above (and adjacent to) groundwater with volatile contaminants) does not present unacceptable risks.*

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3. Are there **complete pathways** between “contamination” and human receptors such that exposures can be reasonably expected under the current (land- and groundwater-use) conditions?

Summary Exposure Pathway Evaluation Table

Potential **Human Receptors** (Under Current Conditions)

“Contaminated” Media Residents Workers Day-Care Construction Trespassers Recreation Food³

Groundwater							
Air (indoors)							
Soil (surface, e.g., <2 ft)							
Surface Water							
Sediment							
Soil (subsurface e.g., >2 ft)							
Air (outdoors)							

Instructions for Summary Exposure Pathway Evaluation Table:

- Strike-out specific Media including Human Receptors’ spaces for Media which are not “contaminated”) as identified in #2 above.
- Enter “yes” or “no” for potential “completeness” under each “Contaminated” Media -- Human Receptor combination (Pathway).

Note: In order to focus the evaluation to the most probable combinations some potential “Contaminated” Media - Human Receptor combinations (Pathways) do not have check spaces (“___”). While these combinations may not be probable in most situations they may be possible in some settings and should be added as necessary.

- ☐ **If no** (pathways are not complete for any contaminated media-receptor combination) - skip to #6, and enter “YE” status code, after explaining and/or referencing condition(s) in-place, whether natural or man-made, preventing a complete exposure pathway from each contaminated medium (e.g., use optional Pathway Evaluation Work Sheet to analyze major pathways).
- ☐ **If yes** (pathways are complete for any “Contaminated” Media - Human Receptor combination) - continue after providing supporting explanation.
- ☒ **If unknown** (for any “Contaminated” Media - Human Receptor combination) - skip to #6 and enter “IN” status code

Rationale and Reference(s):

Complete pathway and human exposures are not known. The May 8, 2000, Order on Consent is requiring a human health risk assessment, which is currently underway. (See May 8, 2000, Order on Consent).

Footnotes:

³ Indirect Pathway/Receptor (e.g., vegetables, fruits, crops, meat and dairy products, fish, shellfish, etc.)

4. Can the **exposures** from any of the complete pathways identified in #3 be reasonably expected to be **“significant”**⁴ (i.e., potentially “unacceptable” because exposures can be reasonably expected to be: (1) greater in magnitude (intensity, frequency and/or duration) than assumed in the derivation of the acceptable “levels” (used to identify the “contamination”); or (2) the combination of exposure magnitude (perhaps even though low) and contaminant concentrations (which may be substantially above the acceptable “levels”) could result in greater than acceptable risks)?

- Rationale and Reference(s):**

[illegible]

Footnotes:

⁴. If there is any question on whether the identified exposures are “significant” (i.e., potentially “unacceptable”) consult a human health Risk Assessment specialist with appropriate education, training and experience.

5. Can the “significant” **exposures** (identified in #4) be shown to be within **acceptable** limits?

- ☐ **If yes** (all “significant” exposures have been shown to be within acceptable limits) - continue and enter “YE” after summarizing and referencing documentation justifying why all “significant” exposures to “contamination” are within acceptable limits (e.g., a site-specific Human Health Risk Assessment).
- ☐ **If no** (there are current exposures that can be reasonably expected to be “unacceptable”)- continue and enter “NO” status code after providing a description of each potentially “unacceptable” exposure.
- ☐ **If unknown** (for any potentially “unacceptable” exposure) - continue and enter “IN” status code.

Rationale and Reference(s):

This image shows a full page of blank primary-ruled paper. It features multiple sets of horizontal lines designed for handwriting practice. Each set consists of three lines: a solid top line, a dashed middle line, and a solid bottom line. These sets are repeated vertically down the entire page, providing ample space for practicing letter formation and alignment. The paper is otherwise completely blank, with no text or other markings.

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6. Check the appropriate RCRIS status codes for the Current Human Exposures Under Control EI event code (CA725), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (and attach appropriate supporting documentation as well as a map of the facility):

- ☐ **YE - Yes**, "Current Human Exposures Under Control" has been verified. Based on a review of the information contained in this EI Determination, "Current Human Exposures" are expected to be "Under Control" at the **BARON BLAKESLEE** facility, EPA ID #**ORD 061483384**, located at **5920 NE. 87th Portland, OR 97220** under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.
- ☐ **NO** - "Current Human Exposures" are NOT "Under Control."
- ☒ **IN** - More information is needed to make a determination.

Completed By:

(Signature)

(Date)

Barb Puchy

Hazardous Waste Specialist

Supervisor:

(Signature)

2/7/01_____
(Date)

Anne Price
(Print Name)

Manager, Hazardous Waste Policy and Program Development
(Title)

Oregon Department of Environmental Quality
(EPA Region or State)

Locations where References may be found:

DEQ - Northwest Region DEQ, 2020 SW. 4th Ave.Ptld. 97201 P

Contact telephone and E-mail numbers:

BILL ROBERTSON
(Name)

503-229-6843
(Phone Number)

(E-Mail)

FINAL NOTE: THE HUMAN EXPOSURES EI IS A QUALITATIVE SCREENING OF EXPOSURES AND THE DETERMINATIONS WITHIN THIS DOCUMENT SHOULD NOT BE USED AS THE SOLE BASIS FOR RESTRICTING THE SCOPE OF MORE DETAILED (E.G., SITE-SPECIFIC) ASSESSMENTS OF RISK.

